

Landing craft on
Red Beach,
Camp Pendleton.

Go West Young Man!

USS Tarawa (David Miller)

Transportation Training and Readiness

By GARY C. HOWARD

The advice of Horace Greeley in the 19th century—*Go west young man!*—applies today to the military. The Army has been transforming from forward basing to projecting power from the continental United States. The global war on terrorism has revalidated the need for lean and lethal forces that can be deployed quickly as well as put a premium on joint warfighting

The level of readiness required to deploy combat power around the world on short notice depends on high-quality joint training that is costly and hard to find—particularly for transporters. Exercises such as Golden Cargo, Golden Mariner, Trans Mariner, and Translots are insufficient to provide the needed opportunities; nor do these exercises offer much in the way of joint training. Part of the solution may be reevaluating the state of current exercises.

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Simulation

One novel solution to this readiness issue combines two programs which provide realistic

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Unloading *USNS William W. Seay*, Cobra Gold '02.

U.S. Navy (Jennifer A. Smith)

The joint logistics over the shore (JLOTS) and download phases have provided an excellent simulation of reception, staging, onward movement, and integration for transportation and support units from active and Reserve components of the Army, Navy, and Coast Guard. The seaport of debarkation has been conducted as pier-side discharges at Port Hueneme and San Diego and as

seaport emergency deployment readiness exercises test the ability of specific ports to project the force

in-stream discharges and JLOTS operations at Camp Pendleton. The challenge of operating at routine sea states of 2 and 3 provides realistic and valuable training.

The most recent JLOTS operation was Native Atlas, which was sponsored by U.S. Central Command and conducted in March–April 2002. Some three thousand members of the Army, Navy, Marine Corps, and Coast Guard simulated a large-scale deployment by transporting equipment of 2^d Brigade, 3^d Infantry Division, across the beach at Camp Pendleton and onto piers in San Diego. *USNS Seay*, a large medium-speed roll-on/roll-off ship, was discharged at sea and the cargo was lifted onto LCU 2000-class Army Reserve vessels. Rolling stock was moved to the roll-on/roll-off discharge facility and Navy lighterage. Once on the beach, the cargo was staged and prepared for onward movement to the National Training Center. The exercise was under the overall direction of 143^d Transportation Command. Participating units from the Army included a Reserve composite group, an active terminal battalion, an active motor transport battalion, a Reserve movement control battalion, a Reserve heavy boat company, port manager units, Reserve and active truck companies, and various movement control, harbor master, and cargo documentation units. In addition, several support units were required.

The operation also involved simulated fuel delivery. Some two million gallons of water in place of petroleum, oil, and lubricants was moved over the beach from *SS Mount Washington*, an off-shore petroleum discharge system tanker from the Maritime Administration Reserve fleet that was located a few miles offshore. This joint feature of the operation involved the Marine Corps assault bulk system, Navy amphibious assault bulk fuel system, and Army inland petroleum distribution system.

training for both transporters and combat forces. For some time, units have been rotated through the National Training Center (NTC) at Fort Irwin. Simultaneously, seaport emergency deployment readiness (SEDRE) exercises test the ability of specific ports to project the force.

Combining SEDREs with unit movements to the National Training Center has become an outstanding driver for training the active and Reserve components in deployment and transportation operations. The upload phase provides real-world joint training for CONUS-based transportation units while exercising power-projection ports.

C-130 landing at Fort Irwin, Millennium Challenge '02.



U.S. Army (Tom Bradbury)

Army camp for JLOTS exercise at Camp Pendleton.



U.S. Navy (Erin Alana Zocco)

This exercise and other JLOTS and discharge operations over the past few years provided outstanding joint training for active and Reserve soldiers and sailors. Importantly, these operations capitalized on available funding committed to bring combat units to the National Training Center.

Exercising Power-Projection Ports

Fielding the theater support vessel, a high-speed catamaran being tested by both the Army and Navy, will dramatically change transportation doctrine. Future JLOTS exercises may also alter significantly. Whatever the effect of the vessel on warfighting doctrine, there will continue to be a need for port readiness exercises.

However, the first step in reception, staging, onward movement, and integration is getting equipment out of the continental United States. Like offload operations, the upload phase presents opportunities for training in mission-essential tasks. At the installation level, a deployment support brigade would help deploying units prepare for movement. Cargo transfer companies would load and tie down equipment on rail cars

and truck trailers. Line-hauling a portion of the equipment to port facilities would provide training for motor transport battalion, truck company, trailer-transfer point, movement control, maintenance support, and other units. A transportation terminal brigade, port security company, and cargo documentation detachments would be used in the actual loading phase. With the addition of harbor defense units, Military Sealift Command, and perhaps a cargo handling battalion, mission-based training could be provided for a thousand or more personnel.

The SEDRE phase can also be an effective driver of transportation training. For example, 3rd Infantry Division equipment for Native Atlas was uploaded in Savannah. The SEDRE program exercises the capability of a power-projection port to operate in a contingency deployment and has been conducted in Savannah, Charleston, Beaumont, and Jacksonville.

In the future, SEDREs are likely to include west coast power-projection ports in Oakland,

Reading Logistics

By DAVID A. SCHRADY

Four classic works on logistics have been reprinted in recent years under the imprint of the Naval War College Press. Although they share a common theme, none deals exclusively with logistics. Moreover, they are no less relevant today than when originally published. George Thorpe argued for establishing a joint staff in *Pure Logistics*. The logistic snowball documented in *U.S. Naval Logistics in the Second World War* by Duncan Ballantine is lamented in *Logistics in the National Defense* by Henry Eccles. And the case for expeditionary logistics is presented in *Beans, Bullets and Black Oil* by Worrall Carter. The books in this series are not intended only for logisticians; they should be read by every joint warfighter.

Pure Logistics: The Science of War Preparation is the earliest work and was described by the author as a scientific inquiry into the theory of logistics. Thorpe perceived warfare as strategy, tactics, or logistics and maintained that "strategy provides the scheme of utilizing our forces, and logistics provides the means thereof." He found that failing to accord a proper role to logistics or neglecting to develop strategy and tactics in concert with logistic capabilities had been disastrous in the past. What he noted in 1917 has been proven by subsequent experience.

Thorpe, a Marine officer, also cited the need for joint operations and common logistics. He further observed that "wargames and chart maneuvers are well enough as far as they go, but they do not provide the necessary logistical instruction."

A Naval Reservist during World War II, Ballantine spent the last two years of that conflict in the Office of the Chief of Naval Operations compiling an administrative record of naval logistics. Early in the war the President had directed that a project be established to chart the administrative

Pure Logistics

by George C. Thorpe
Newport, Rhode Island: Naval War College Press, 1997.
122 pp.

U.S. Naval Logistics in the Second World War

by Duncan S. Ballantine
Newport, Rhode Island: Naval War College Press, 1998.
308 pp.

Beans, Bullets and Black Oil

by Worrall R. Carter
Newport, Rhode Island: Naval War College Press, 1998.
482 pp.

Logistics in the National Defense

by Henry E. Eccles
Newport, Rhode Island: Naval War College Press, 1997.
347 pp.

For more information on these titles see:
<http://www.nwc.navy.mil/press/Books/log.htm>

course of the effort for posterity. *U.S. Naval Logistics in the Second World War* was one result. Far from a tedious chronicle, Ballantine paints a tortured picture of the innumerable attempts by the Navy Department to organize itself to plan and conduct operational logistics.

Logistics is integral to command. As Joint Pub 4-0, *Doctrine for Logistic Support of Joint Operations*, indicates: "To exercise control at the strategic, operational, and tactical levels of war, commanders must also exercise control over logistics." Yet many officers either do not fathom or want to control logistics. As the Navy struggled with logistics in World War II, the Chief of Naval Operations, Admiral Ernest King, remarked: "I don't know what this logistics is that Marshall is always talking about, but I want some of it." For senior military leaders to admit in wartime that they know nothing about logistics is a frightening situation. It stems from failing to recognize that it is part of command. This must have contributed to many attempts to organize for logistics and, as Ballantine recognized, "the growing discrepancy between the forms of naval organization and the emerging character of the logistic task."

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Admiral Chester Nimitz did not establish a logistic element on the Pacific Ocean Area Joint Staff until September 1943. Moreover, the Navy did not produce an overall logistic plan until the end of September 1944. Another problem was that asset visibility was virtually nonexistent. The first inventory was completed at the end of 1944 and limited to the continental United States—there was none taken in theater. Not knowing what was on hand resulted in ordering more.

Although the Navy struggled with operational logistics, forces afloat were being supported by diligent and creative operators. Carter was one of those players in the Pacific. *Beans, Bullets, and Black Oil* deals with providing resources to sustain men, aircraft, and ships; but it is also about facilities, maintenance, and battle damage repair for those forces. It is an account of expeditionary logistics on a grand scale with maps, illustrations, and photographs.

Wargames conducted during the 1920s and 1930s at Newport and elsewhere indicated that because of geography in the Pacific, the outcome of a conflict would be determined by the ability to transport and sustain forces at great distances from home. The Navy commissioned studies of advanced bases in 1938. After the war began, large forward logistic sites were established ashore in the southwest Pacific. But as bases were being developed, it was apparent that they would soon be too far in the rear to support advancing forces optimally.

The concept of mobile sea bases that could move with the forces was developed at this point. Instead of logistic bases ashore, logistic support was assembled in ships of mobile service squadrons. There were vessels to transport fuel and ammunition, distill and store water, serve as barracks and hospitals, perform maintenance, et al. All they required was a secure lagoon or harbor. The original location of Service Squadron Ten under Admiral Carter was Majuro in the Marshall Islands, some 2,000 miles north of bases at Espiritu Santo and Nomeau. The squadron then moved 800 miles west to Eniwetok, 1,300 miles west to Ulithi, and another 1,000 miles west to Leyte, following and supporting the combat fleet. As Carter said, "The advantages of logistics afloat and near the fleet operating area had long been recognized by many naval commanders and no doubt by others who gave the matter analytical thought."

Carter brings logistics in the Pacific theater to life. It was sea-based logistics—responsive to the warfighters—and it minimized time away from combat for replenishment. It also maintained and repaired ships in theater and returned

battle damaged vessels to service, thereby conserving the strength of the forward operating forces. The value of sturdy ships and a strong repair capability is strikingly demonstrated.

Logistics in the National Defense is based on the experiences of Admiral Eccles both during World War II and in the classroom at Newport. His book is focused on operational factors such as the logistic snowball and organizational issues, which are treated comprehensively.

A logistic snowball is a buildup of stocks far beyond need and results from various causes. Recalling *Industrial Dynamics* by Jay Forrester in 1961, the use of all the spares of a given item is interpreted on the unit level as underplanning, and the remedy is overplanning. If ten spares are used, the call goes out for a hundred replacements so the item will never again be out of stock. Planners at the next echelon record a tenfold increase in demand and move ten times more spares than required to the theater, having a snowball effect. Discipline and asset visibility are required to control the process. In Desert Storm, visibility was lost when items moved from supply channels to the transportation system. And without asset visibility and timely delivery, units assumed that their orders were misplaced and reordered. This resulted in a mountain of iron on the beach among other problems. Since then attention has been given to attaining asset visibility, including in-transit visibility, and the concept of focused logistics, all aimed at reducing the logistic footprint ashore.

These books are classics and good reading. They contain important lessons about logistics in war and the exercise of command. The Naval War College is to be commended for making them available again. Making new mistakes may be unavoidable, but repeating old ones should not be tolerated under any circumstances.

JFQ

Army National Guard artillery, National Training Center.



U.S. Army (John J. Murphy)

Army train leaving Fort Eustis, Native Atlas.



CIV TASC (Charlie Aston)

San Diego, Long Beach, Port Hueneme, and Seattle. These ports complement east and gulf coast ports, each with world-class facilities that are considerably closer to two major theaters. All offer protected transport within the United States and avoid use of the highly vulnerable Panama Canal. The west coast is not susceptible to hurricanes, which recently shut down infrastructure supporting the port of Charleston for several weeks. Careful analysis clearly documented that the cost of port exercises in Oakland is comparable to those on the east coast.

The well-established training model that combines SEDRES and NTC rotations can easily be applied to a SEDRE on the west coast. Units at Fort Carson regularly move for training. For example, 3^d Armored Cavalry Regiment is scheduled to rotate in July/August 2003 and 4th Infantry Division in October/November 2003. Their equipment could be transported by rail or truck from Oakland for upload onto a fast sealift ship or a

large medium speed roll-on/roll-off ship and for in-stream JLOTS discharge at Camp Pendleton or a pier-side discharge in San Diego.

Alternatively, 2/3^d Armored Cavalry Regiment is scheduled to rotate to the Joint Readiness Training Center at Fort Polk in October 2003. In a reversal of what has become the model of east coast upload and west coast offload, their equipment could be uploaded in Oakland and offloaded in a pier-side offload in Beaumont or by a JLOTS operation at Eglin Air Force Base. In any of these scenarios, the SEDRE at Oakland would provide outstanding training for a large number of active and Reserve personnel while exercising an important power-projection port.

Combining SEDRES with NTC rotations greatly enhances training for both warfighters and support organizations while maximizing training dollars. This concept can be expanded to provide similar high-quality joint training to various combat and combat service support units of the active and Reserve components on the power projection half of the equation. More importantly, it offers a model for how training dollars can be leveraged. We must continue to enhance readiness, particularly by capitalizing on existing facilities and training in a cost-effective manner.

JFQ